Beyond Land Conservation: Conservation Easements as a Tool for Water

Conservation Easements have long recognized that water rights support numerous public benefits

- Wildlife Habitat
- Ecosystem Function
- Food Production
- Rural Economy and Heritage

Traditional restrictions said that water rights cannot be leased or sold (must continue historic use).

Conservation easement

Voluntary legal agreement on a specific property between a private landowner and a land trust or other holder that restricts or prohibits certain uses of a property and its water rights in order protect the property's conservation values forever.

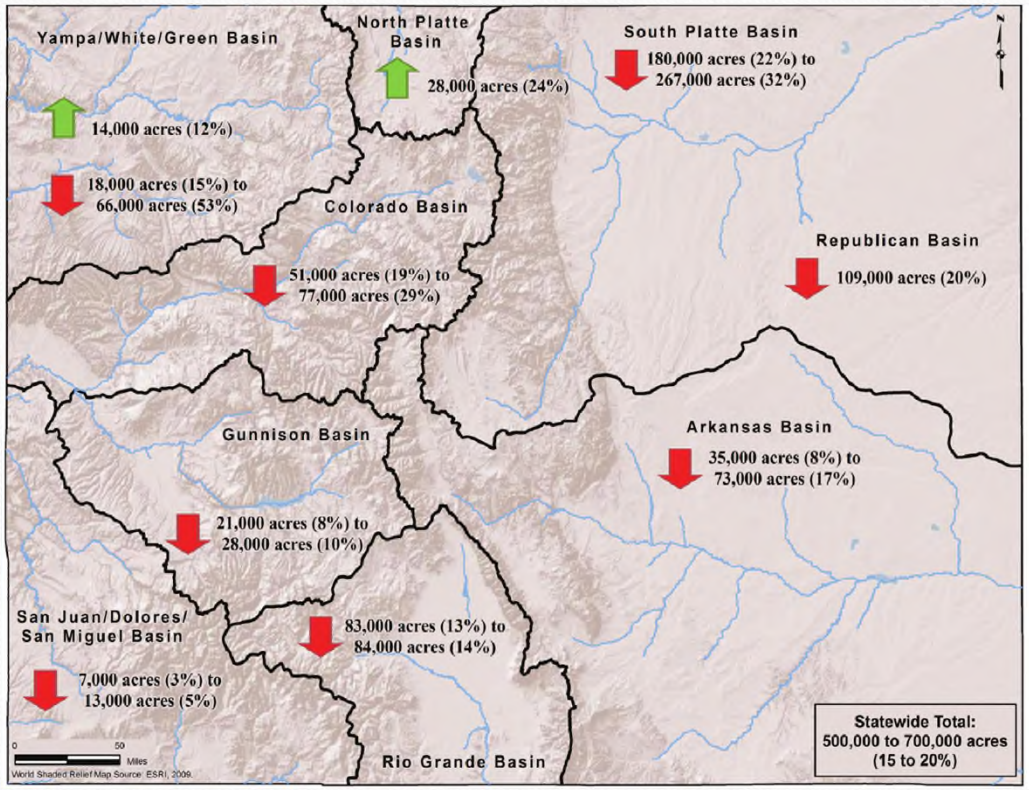
Before Value – After Value = Conservation Easement Value

Before value involves a determination of highest and best use of the property; uses adjusted comparable sales data (what would someone pay for this land and water today?)

After value is based on impact of the conservation easement restrictions on the highest and best use; uses sales of comparable conservation easement encumbered properties (how do the restrictions impact the marketability?)

Land and water are often valued together, but a separate valuation of water rights may be conducted in places where there is an active water market.

Reimagining conservation easements to address Colorado's water challenges



Conversion from agriculture to urban use = 230,000+ acres

Groundwater sustainability =

Republican Basin upwards of 135,420+ acres

Rio Grande Basin 81,000+ acres

Reducing Buy and Dry:
Coupling Conservation Easements and ATMs

Why think about these tools together?

1) Easements provide certainty to all parties
    - Municipality: Secure source of leased water (cannot be purchased by competitor)
    - Farmer: Diversification of income with certainty for ditch that water will never be sold

2) Brings additional resources to the table
3) Allows protections to be built into the CE for natural resources (e.g. soil)

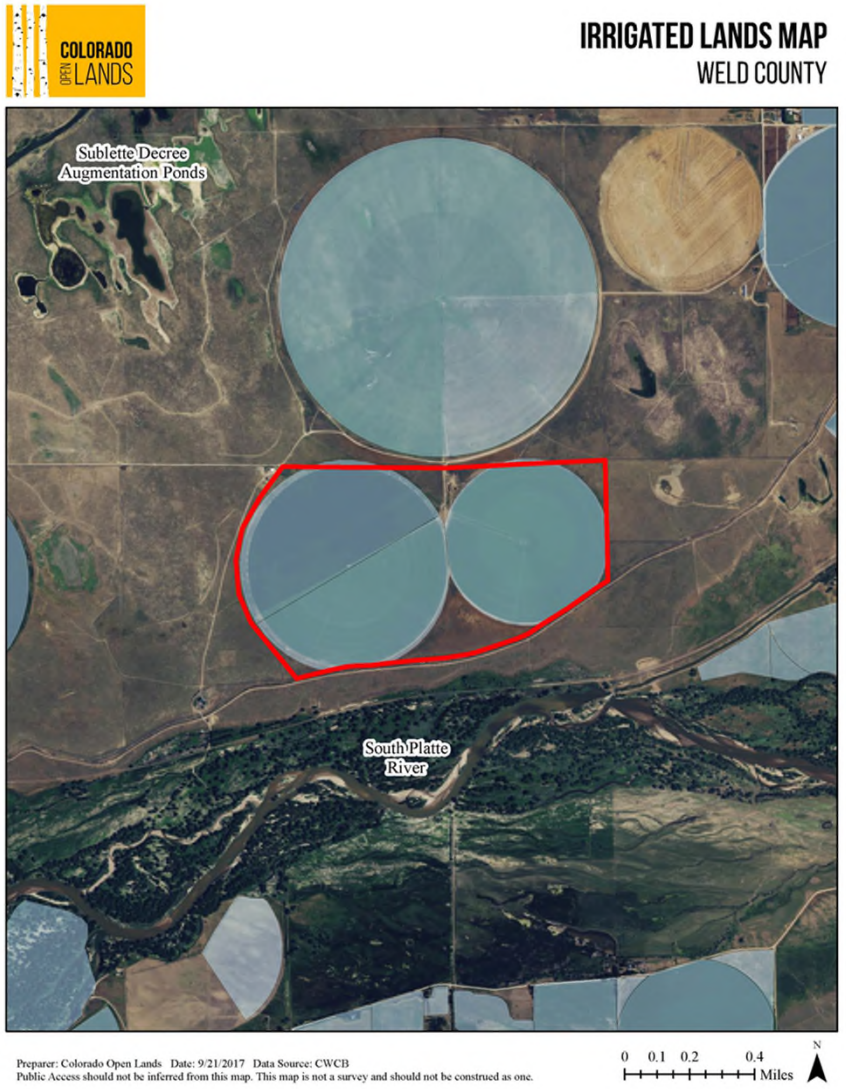
Example

400-acre farm in Eastern Weld County

Farm value (largely water rights): $3.8M

Conservation Easement value: $1.4M

CE ensures that water can never be sold, but allows for leasing



NRCS

WALTON FAMILY
FOUNDATION

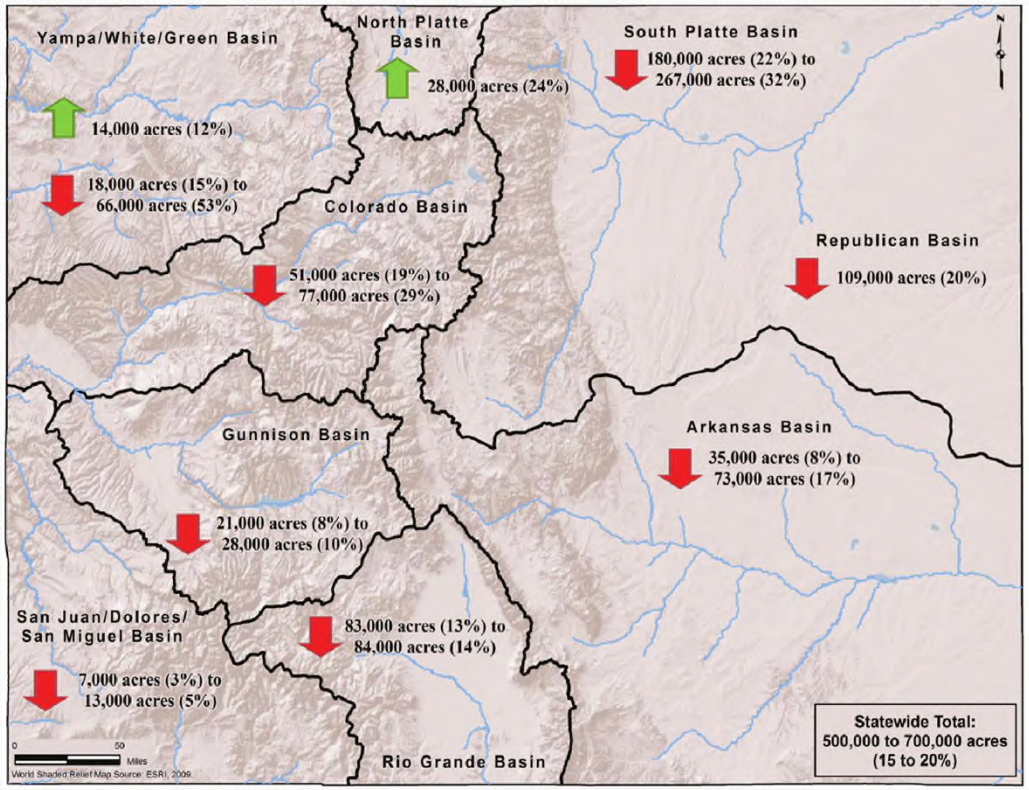
DUCKS UNLIMITED

COL raised $1.3 Million
($850,000 for easement purchase and $450,000 for ATM process, including landowner legal costs)

Farmer is in final stages of lease agreement with city

CO DNR

Water Conservation Board



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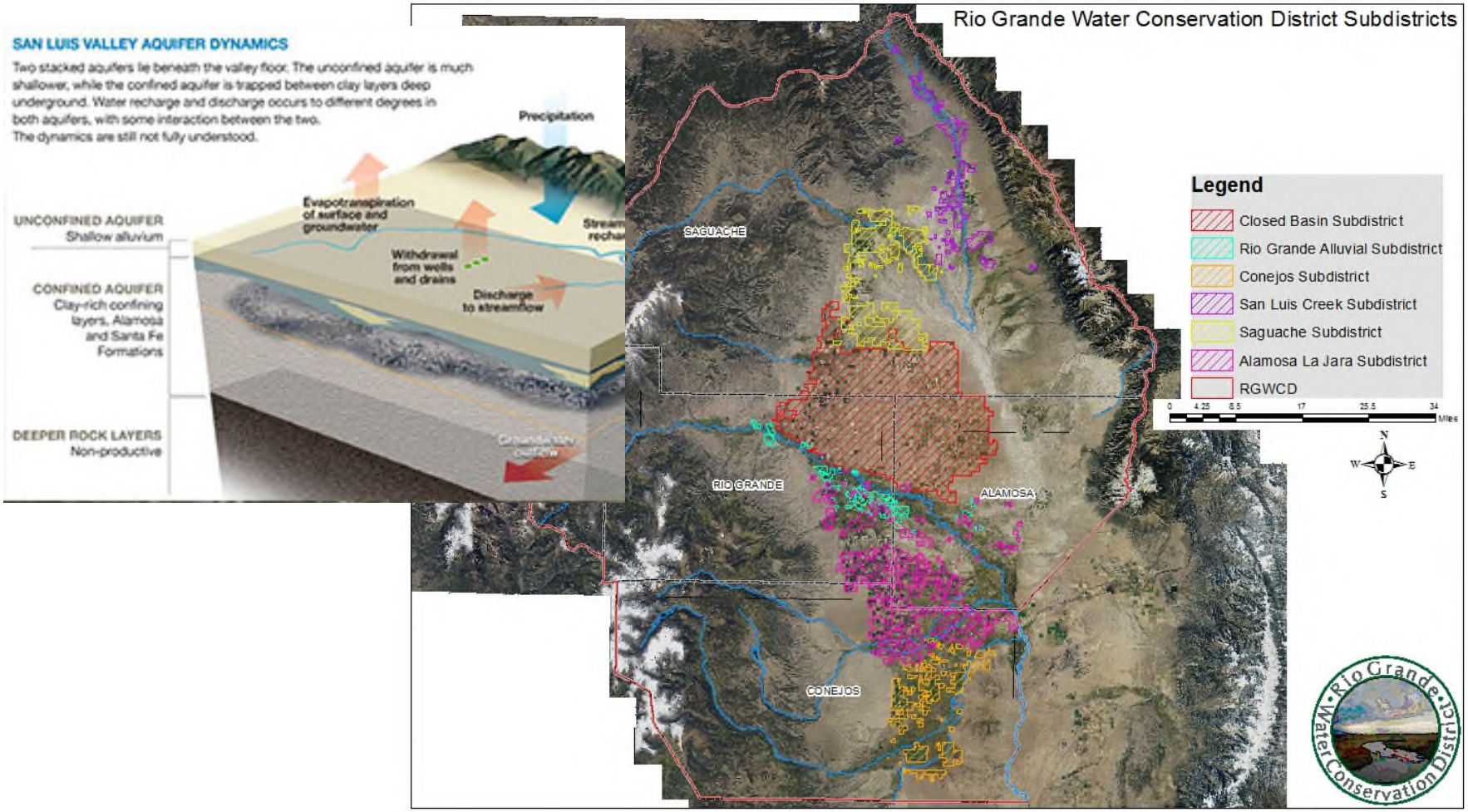
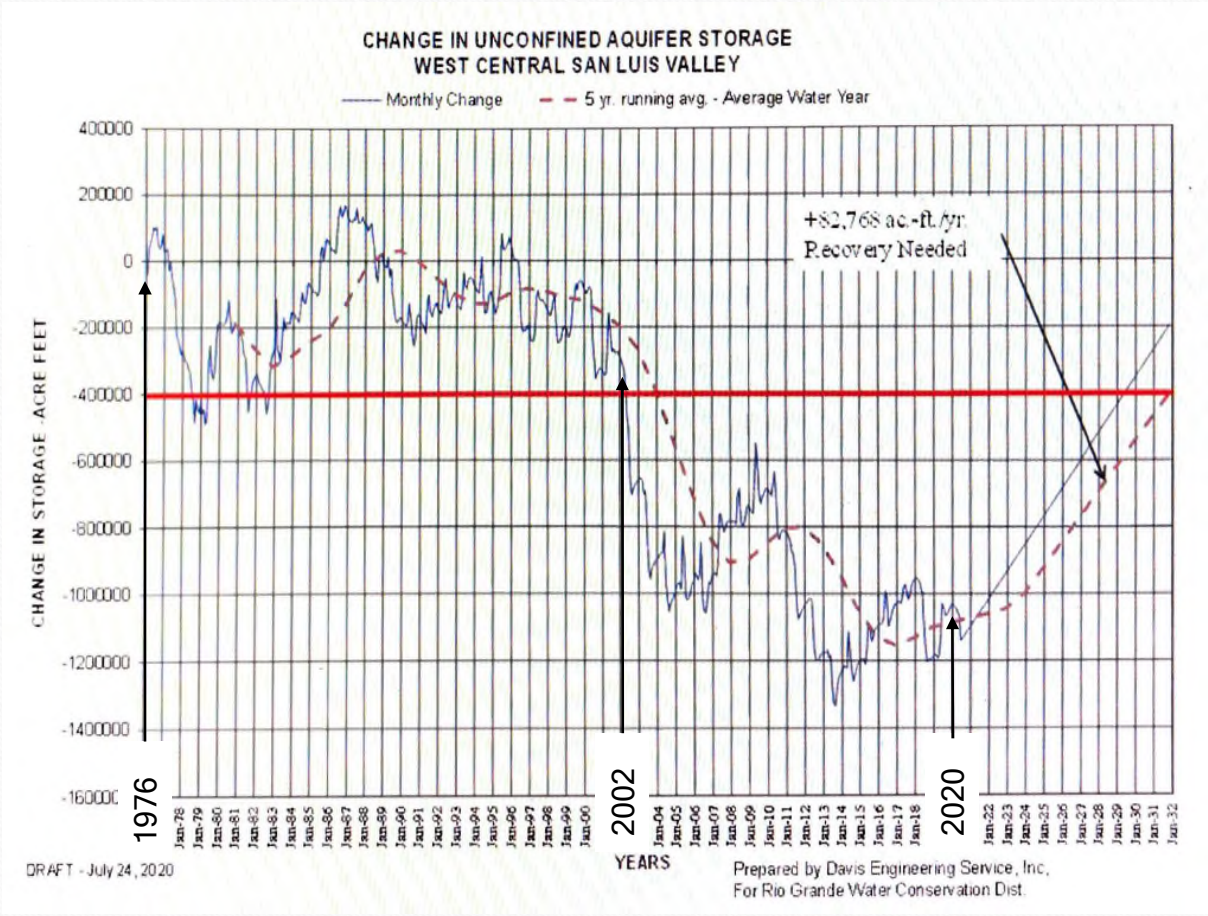

SAN LUIS VALLEY AQUIFER DYNAMICS
Two stacked aquifers lie beneath the valley floor. The unconfined aquifer is much shallower, while the confined aquifer is trapped between clay layers deep underground. Water recharge and discharge occurs to different degrees in both aquifers, with some interaction between the two.
The dynamics are still not fully understood.
Precipitation
Evapotranspiration of surface and groundwater
Withdrawal from wells and drains
Discharge to streamflow
UNCONFINED AQUIFER
Shallow alluvium
CONFINED AQUIFER
Clay-rich confining layers, Alamosa and Santa Fe Formations
DEEPER ROCK LAYERS
Non-productive
Rio Grande Water Conservation District Subdistricts
SAGUACHE
RIO GRANDE
ALAMOSA
CONEJOS
Legend
Closed Basin Subdistrict
Rio Grande Alluvial Subdistrict
Conejos Subdistrict
San Luis Creek Subdistrict
Saguache Subdistrict
Alamosa La Jara Subdistrict
RGWCD
0 4.25 8.5 17 25.5 34
Miles
N
W
E
S
Rio Grande Water Conservation District


CHANGE IN UNCONFINED AQUIFER STORAGE
WEST CENTRAL SAN LUIS VALLEY
Monthly Change
5 yr. running avg. - Average Water Year
+82,768 ac.-ft./yr.
Recovery Needed
CHANGE IN STORAGE - ACRE FEET
400000
200000
0
-200000
-400000
-600000
-800000
-1000000
-1200000
-1400000
-160000
1976
2002
2020
YEARS
DRAFT - July 24, 2020
Prepared by Davis Engineering Service, Inc.
For Rio Grande Water Conservation Dist.

Creating a new tool – Groundwater Conservation Easements

- Rather than focusing on land restrictions, focus on limiting groundwater pumping
- Percent reduction in pumping is permanent, but irrigator determines how to best achieve that reduction (not all or nothing)
- Works in partnership with the Rio Grande Water Conservation District to ensure that water is left in aquifer
- Anticipate leveraging funding ($7.5M secured)

New opportunities through HB21-1233

- Conservation Easement Enhancement and Rural Stimulus Act allows for certain water entities to convey conservation easements and qualify for state tax credits:
  - Water Conservancy Districts
  - Water Conservation Districts
  - Mutual ditch companies and acequias
- Presents an opportunity for collective purchasing of farms/ranches with critical water rights. Ditch may buy, protect and recoup some investment, and then re-sell to irrigator.

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